

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addiese: COMMISSIONER FOR PATENTS P O Box 1450 Alexandra, Virginia 22313-1450 www.wepto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,239	01/27/2006	Carsten Eusterbarkey	SCH-16446	8758
40854 7590 04/15/2009 RANKIN, HILL & CLARK LLP			EXAMINER	
38210 Glenn Avenue			ANDRISH, SEAN D	
WILLOUGHBY, OH 44094-7808			ART UNIT	PAPER NUMBER
			3672	
			MAIL DATE	DELIVERY MODE
			04/15/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) EUSTERBARKEY, CARSTEN 10/563 239 Office Action Summary Examiner Art Unit SEAN D. ANDRISH 3672 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 30 January 2009. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1 - 6, 8 - 13, 15 - 22, and 24 - 26 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)

Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date \_\_\_\_\_\_.

Paper No(s)/Mail Date.

6) Other:

5) Notice of Informal Patent Application

Application/Control Number: 10/563,239 Page 2

Art Unit: 3672

## DETAILED ACTION

#### Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every
feature of the invention specified in the claims. Therefore, the "spacers" and "connecting
means" as recited in claim 13 must be shown or the feature(s) canceled from the claim(s). No
new matter should be entered

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Objections

2. Claims 1, 4, 8, 10, 11, 21, and 22 are objected to because of the following informalities:

Application/Control Number: 10/563,239 Page 3

Art Unit: 3672

a. In claim 1, line 2; claim 20, line 2; and claim 26, line 2: "the ground" should be changed to -a ground-:

- In claim 4, line 2: "one single pile-like device" should be changed to --the at least
  one single pile-like device--:
- c. In claim 8, line 2: "the region" should be changed to --a region--;
- d. In claims 10 and 11 applicant should identify the specific elements (pile element, reinforcement element, or both) of the claimed invention to which the phrase "the tubes" refers.
- e. In claim 21, line 3: "a gap" should be changed to --the gap--;
- f. In claim 22, line 2: "the arrangement" should be changed to --an arrangement--;
- Appropriate correction is required.

#### Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claims 1 and 26, the phrase "can be" renders the claim indefinite because it is
unclear whether the limitation(s) following the phrase are part of the claimed invention. See
 MPEP § 2173.05(d).

## Claim Rejections - 35 USC § 102

 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Application/Control Number: 10/563,239 Art Unit: 3672

 Claims 1 - 6, 8, 10, 16 - 22, and 24 - 26 are rejected under 35 U.S.C. 102(b) as being anticipated by De Medieros, Jr. et al. (5,228,806).

Regarding claims 1, 2, 3, 6, 16 - 22, and 26, De Medieros, Jr. et al. discloses a foundation comprising; an elongate pile element (44); a reinforcement element (42); a gap (46) partially filled with an elevated specific weight composition such as high specific weight mortar or hematite; and a junction piece (flange 66, tubular ring 64) disposed directly between the pile-like device (40) and the construction (template 62) which connects them to one another with the connection between the pile-like device (40) and the junction piece (flange 66) being adapted to transmit bending moments (Figs. 1, 2, 5B, 6B, and 7; column 2, lines 45 - 50). The claim limitation(s) do not require the construction to be located on top of the pile-like structure and, therefore, the template of De Medieros, Jr. et al. is considered to be functionally equivalent to the construction of the present application. Examiner refers applicant to column 3, lines 45 - 46 of De Medieros, Jr. et al. which teaches the junction piece (flange 66) in direct contact with the template (62). Lateral movement of the template (62) applies force against the flange (66). resulting in lateral movement of the flange relative to the longitudinal axis of the pile-like structure (40) and the transmission of bending moments to the pile-like structure (40) through the finger-like extensions of the flange (66) located in the gap between the elongate pile element (44) and the reinforcement element (42) (Fig. 5B).

Regarding claim 4, De Medieros, Jr. et al. further discloses a pile-like device which is an extension of a vertical axis of the construction (Fig. 2).

Regarding claim 5, De Medieros, Jr. et al. further discloses a plurality of piles (column 1, lines 11 - 14).

Regarding claims 8 and 10, De Medieros, Jr. et al. further discloses annular accumulations of mortar or hematite applied to the tubes (Fig. 5B; column 2, lines 45 - 50). The mortar or hematite positioned between the inner and outer tubes above flange 66 is considered the means for increasing transfer of shear.

Regarding claims 24 and 25, De Medieros, Jr. et al. further discloses introducing the pile into the ground by a drilling method (Fig. 2; column 1, lines 45 - 52).

# Claim Rejections - 35 USC § 103

- The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
  obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Medieros, Jr. et al. in view of Holley, Jr. (3,851,483). De Medieros, Jr. et al. discloses all of the limitations of the above claim(s) except for means for increasing transfer of shear are disposed on an inner face of an outer tube and on an outer face of an inner tube. Holley, Jr. teaches shear transmitting diaphragms (14, 15) (Fig. 2; column 3, lines 15 22) to maintain a space between the inner and outer tubes. It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the structure as disclosed by De Medieros, Jr. et al. with the shear transmitting diaphragms as taught by Holley, Jr. to maintain a space between the inner and outer tubes.
- Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Medieros, Jr. et al. in view of Holley, Jr. as applied to claim 1 above, and further in view of

Allen (2,080,406). De Medieros, Jr. et al. in view of Holley, Jr. discloses all of the limitations of the above claim(s) except for the transfer of shear comprises at least three fins. Allen teaches a plurality of spacers (16) (Fig. 1 illustrates 4 spacers) to maintain the pile centered within an outer wall through the use of spacers positioned at different depths within the wellbore. It would have been considered obvious to one of ordinary skill in the art, at the time the invention was made, to have modified the structure as disclosed by De Medieros, Jr. et al. in view of Holley, Jr. with the fins as taught by Allen to maintain the pile centered within an outer wall through the use of spacers positioned at different depths within the wellbore.

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over De Medieros, Jr. et al. De Medieros, Jr. et al. teaches a mechanical connection between the junction piece and the construction (column 3, lines 41 - 53) to provide an inexpensive connection between the pile and the construction for use in deep water locations. It would have been considered obvious to one of ordinary skill in the art at the time the invention was made to use a mechanical connection comprising a screw flange as a matter of design choice within the skill of the art.

# Response to Arguments

 Applicant's arguments filed 30 January 2009 have been fully considered but they are not persuasive.

Applicant argues that De Medieros, Jr. et al. does not teach a junction piece that connects the construction to the pile-like structure, the connection between the pile-like device and the junction piece adapted to transmit bending moments. The claim limitation(s) do not require the construction to be located on top of the pile-like structure and, therefore, the template of De Medieros, Jr. et al. is considered to be functionally equivalent to the construction of the present

Application/Control Number: 10/563,239

Art Unit: 3672

application. Examiner refers applicant to column 3, lines 45 - 46 of De Medieros, Jr. et al. which teaches the junction piece (flange 66) in direct contact with the template (62). Lateral movement of the template (62) applies force against the flange (66), resulting in lateral movement of the flange relative to the longitudinal axis of the pile-like structure (40) and the transmission of bending moments to the pile-like structure (40) through the finger-like extensions of the flange (66) located in the gap between the elongate pile element (44) and the reinforcement element (42) (Fig. 5B).

#### Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SEAN D. ANDRISH whose telephone number is (571)270-3098. The examiner can normally be reached on Mon - Fri, 7:30am - 5:00pm, Alternate Fri off, EST.

Art Unit: 3672

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sunil Singh/ Primary Examiner, Art Unit 3672 Sunil Singh Primary Examiner Art Unit 3672

SDA 3/31/2009